# MegaDome®
# Installation Manual

Arecont Vision

megapixel technology...
**beyond imagination**

# MegaDome® Installation Manual

## Inside the box:

A. Arecont Vision MegaDome®
B. Mounting template
C. Magnetic core
D. Pack of four (4) wood screws and four (4) dry wall anchors
E. One double sided hex key
F. One single sided hex key
G. Security L-key
H. Power cable

## Not included but needed:

- #1 Phillips head screw driver
- #2 Phillips head screw driver

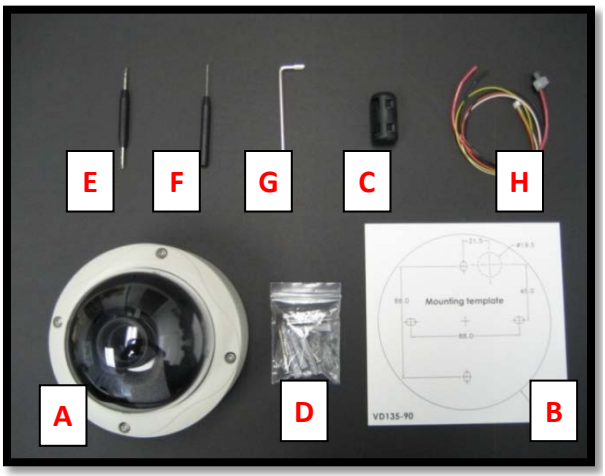


**Image 1**

## Mounting the Camera:

1. Remove camera and hardware from the box.
2. Using the Mounting template, prepare the mounting provisions for camera installation. *NOTE: the 19.5mm diameter hole on the Mounting template is where the Ethernet cable will be exiting the MegaDome®, align accordingly. If using the side conduit hole, please see **step 9** below.*
3. Using Security L-key, loosen the four (4) screws securing the dome cover **(Image 2)**. Remove vandal resistant dome cover. *NOTE: Do not remove screws from the dome cover.*

**Image 2**

4. Run Ethernet cable through the hole on the bottom of the camera **(Image 3)** and plug it into the RJ45 port. *NOTE: If the camera will be powered via PoE, please skip to **step 6**.*

5. If the camera is powered by an outside power supply, run the supplied power cable through the hole and connect it to its respective connector inside the camera **(Image 3)**. *NOTE: Make sure that your installation of wires complies with Electrical Code of the local government where the camera is installed and no bare wires are exposed.*

6. Align the holes in the camera with the prepared holes on the mounting surface. Attach the camera to the mounting surface with the wood screws or any optional hardware suitable for the mounting surface.

7. Install the included magnetic core onto the Ethernet cable as shown in **Image 4**. *NOTE: Ensure both tabs are tightly secured.*

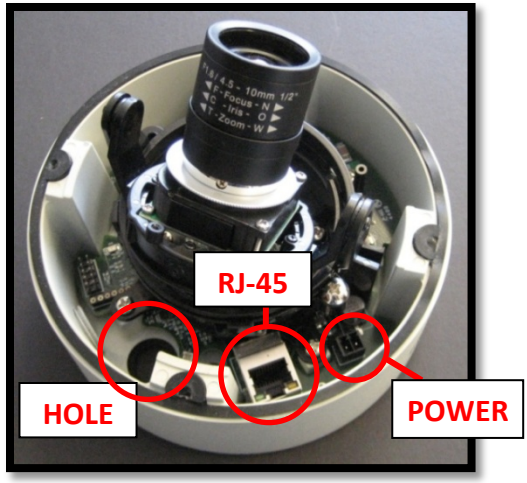


**Image 3**

**Image 4**

8. Reference **Image 5** for proper positioning of the magnetic core.

9. If you are using the side conduit opening, remove the conduit plug by first removing the socket set screw using one of provided Allen keys **(Image 6)**.

**Image 5**

**Image 6**

**Adjusting the Tilt, Pan, Z-axis (yaw) and Focus:**

10. To adjust the tilt, use a #1 Phillips screwdriver to loosen the screw on the side of the plastic lens bracket 1/4 turn **(Image 7)**. *CAUTION: Do not remove the screw!*

11. Adjust lens tilt as required and tighten the screw from **step 10**.

12. To adjust the pan, use a #2 Phillips screwdriver to loosen the screw as shown in **Image 7**.

13. Adjust the pan as required and tighten the screw from **step 2**.

14. To adjust the Z-Axis, or Yaw, for vertical wall mounting, loosen the set screw as shown in **Image 7**. *NOTE: There are two set screws on opposite sides; both need to be loosened.*

15. Adjust the Z-Axis as required and tighten the set screw back down.

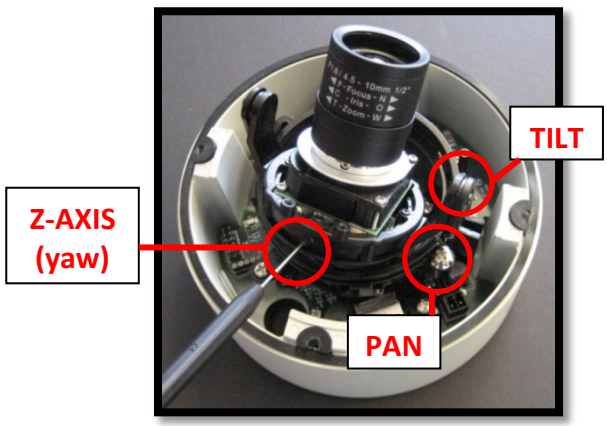


**Image 7**

16. To adjust back focus, loosen the two (2) set screws with the appropriate Allen key as shown **Image 8** (only one of two screw holes shown). Adjust the silver back focus ring as needed and tighten down the set screws.

17. To focus the lens, loosen the three set screws as shown in **Image 9** and adjust each as needed. **A** adjusts the zoom, **B** adjusts the iris (adjustment is the band between A and C as outlined in red; there is no set screw), **C** adjusts the focus.

18. Remove the protective film from the camera dome. *NOTE: be cautious not to scratch the vandal dome cover.*

19. Secure the vandal dome cover to the camera.

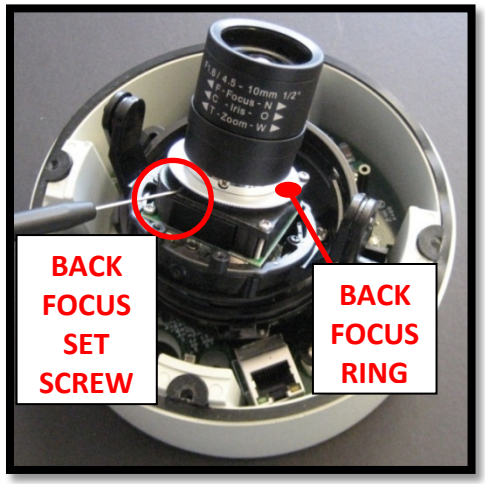


**Image 8**

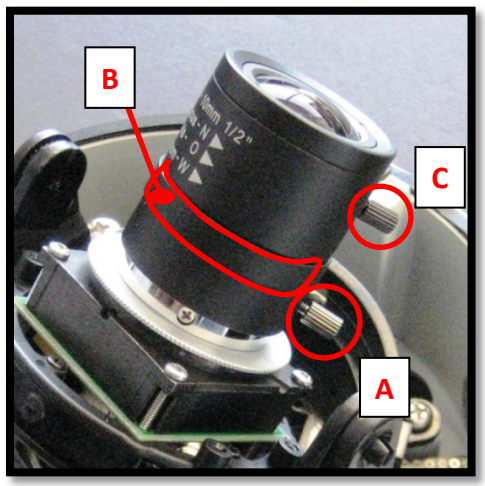


**Image 9**

## MegaDome® Pendant Mount (MD-CMT) Installation Instructions

**Inside the box:**

A. Top shield
B. Pendant Mount
C. Mounting template
D. Pack of four (4) machine screws
E. Pack of four (4) small machine screws
F. Pack of four (4) wood screws and four (4) dry wall anchors
G. Large round rubber gasket
H. Smaller square rubber gasket
I. One double sided hex key

**Not included but needed:**

J. #2 Phillips head screw driver

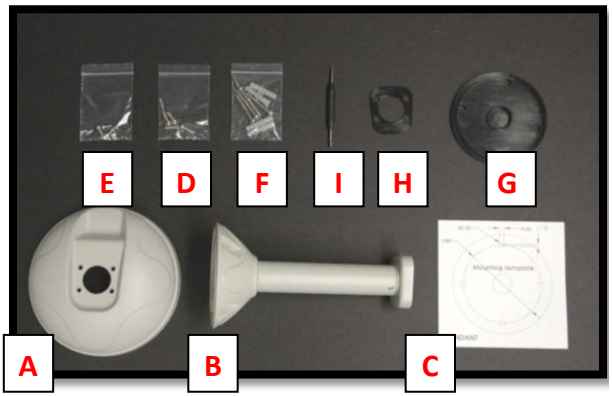


**Image 10**

20. Remove Pendant Mount and hardware from the box.

**Image 11**

**Image 12**

21. Using the Mounting template, prepare the mounting provisions for camera installation.

22. Place small gasket onto pendant dome as shown in **image 11**.

23. Attach Dome to Pendant as shown in **Image 12** using four machine screws provided.

24. Install large round rubber gasket onto Pendant as shown in **image 12**. Be sure to align the holes appropriately.

25. Run Ethernet Cable and outside power cable (if necessary) through the Pendant.

26. Attach Pendant to the ceiling using the four wood screws provided or any optional hardware suitable for the mounting surface.

27. For installation of the camera, please reference "**Mounting the Camera**".

## MegaDome® Wall Mount (MD-WMT2) Installation Instructions

**Inside the box:**

A. Wall mount
B. Top shield
C. Mounting template
D. One double sided hex key
E. Pack of four (4) machine screws
F. Pack of four (4) wood screws and four (4) dry wall anchors

**Not included but needed:**

- #2 Phillips head screw driver

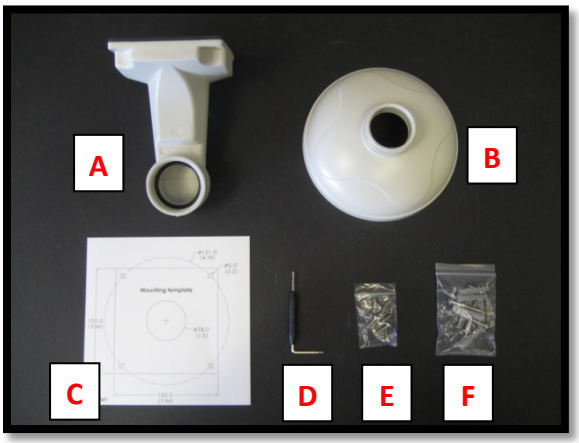


**Image 13**

28. Remove Wall Mount and hardware from the box.

**Image 14**

29. Using the Mounting template, prepare the mounting surface.

30. Install Top Shield on Wall Mount as shown in **image 14**.

31. Fasten the socket set screw using double side hex key.

32. Run Ethernet Cable and outside power cable (if necessary) through the Wall Mount.

33. Attach Wall Mount to the wall using drywall screws or any optional hardware suitable for the mounting surface.

34. For installation of the camera, please reference "**Mounting the Camera**".

## MegaDome® Wall Mount Cap (MD-CAP) Installation Instructions

**Inside the box:**

A. Wall Mount Cap (MD-CAP)
B. Pack of four (4) machine screws

**Not included but needed:**

- 1½" NPT Pipe nipple
- 1½" NPT Coupling
- 1½" NPT Flange
- #2 Phillips head screw driver

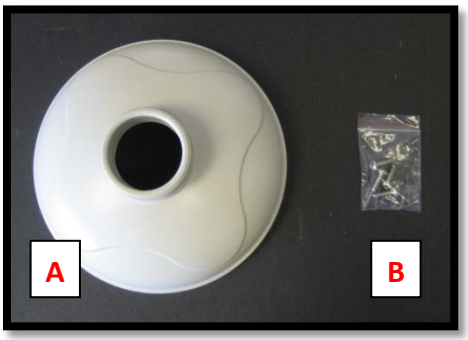


**Image 15**

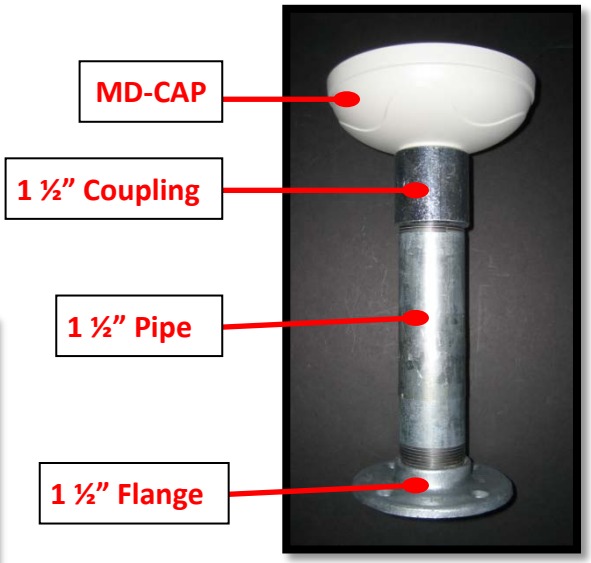


**Image 16**

35. Remove Wall Mount Cap from the box.

36. Assemble Wall Mount Cap, 1½" Coupling, 1½" Pipe nipple and 1½" Flange as a Pendant Mount shown in **image 16**.

37. Run Ethernet Cable and outside power cable (if necessary) through the Pendant.

38. Attach Pendant to the ceiling using four wood screws or any optional hardware suitable for the mounting surface

39. For installation of the camera, please reference "**Mounting the Camera**".

## MegaDome® Junction Box Adapter (MD-JBA) Installation Instructions

**Inside the box:**

A. Junction Box Adapter
B. Pack of four (4) machine screws
C. Pack of four (4) wood screws and four (4) dry wall anchors
D. Large round rubber gasket
E. One double sided hex key

**Not included but needed:**

- #2 Phillips head screw driver
- MegaDome® Wall Mount, MD-WMT
- ¾" NPT Conduit (if necessary)

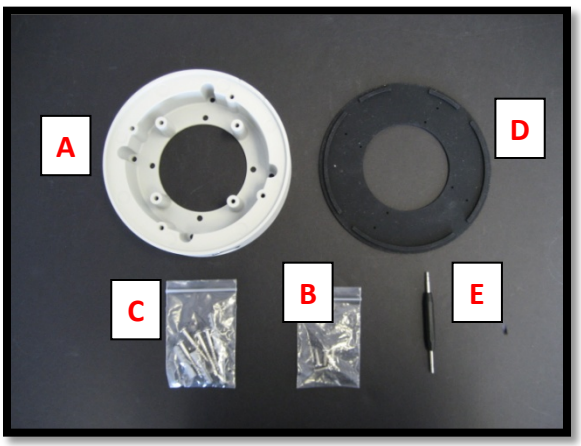


**Image 17**

40. Remove Junction Box and hardware from the box

**Image 18**

**Image 19**

41. Remove the conduit plug by first removing the socket set screw using one of provided Allen keys shown in **Image 18**.

42. Attach Junction Box Adapter to the wall using drywall screws or any optional hardware suitable for the mounting surface.

43. Attach MegaDome® Wall Mount to Junction Box Adapter as shown in **Image 19**.

44. Connect ¾" NPT Conduit to Junction Box Adapter

45. Run Ethernet Cable and outside power cable (if necessary) through the Junction Box Adapter and Wall Mount.

46. For installation of the camera, please reference "**Mounting the Camera**".

**MegaDome® Flush Mount Adapter (MD-FMA) Installation Instructions**

**Inside the box:**

F. Flush Mount Adapter
G. White Trim Ring
H. Pack of four (4) machine screws and one (1) I-Blot
I. Mounting template

**Not included but needed:**

- #2 Phillips head screw driver

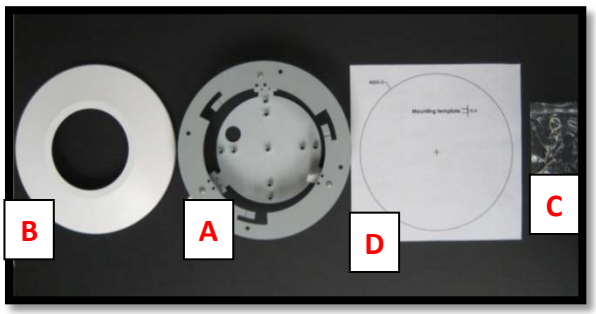


**Image 20**

47. Remove Flush Mount Adapter, Trim Ring and hardware from the box

48. Attach Dome to Flush Mount Adapter as shown in **Image 21**. Please reference "**Mounting the Camera**", if needed.

49. Using the Mounting template, cut a hole in surface for mounting.

50. Insert Flush Mount Adapter into the hole.

51. Screw the "lever screws" until the FMA is snuggly installed, as shown in **Image 21**. The "Support Arm" will ride down the screw to compress the mounting surface**.** *NOTE: Do not over-torque the lever screws*

52. Attach the Trim Ring to the Flush Mount Adapter by rotating clockwise as show in **Image 22.**

**Image 21**

**Image 22**

## MegaDome® Electrical Box Adapter (MD-EBA) Installation Instructions

**Inside the box:**

A. Electrical Box Adapter
B. Pack of four (4) machine screws

**Not included but needed:**

- #2 Phillips head screw driver
- Common Electrical Box, such as single gang box, double gang box or square electrical box.

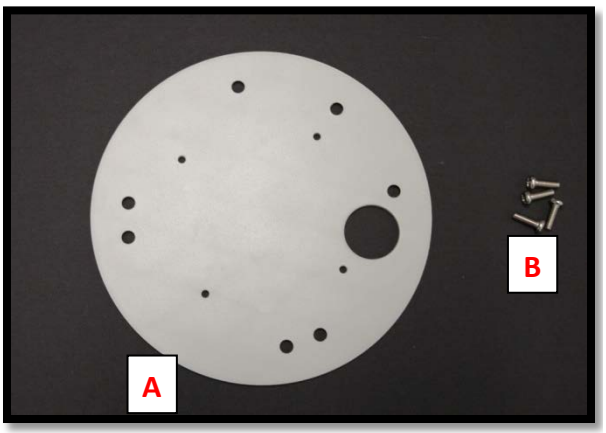


**Image 23**

53. Remove Electrical Box Adapter and hardware from the box.

54. Attach Electrical Box Adapter to Electrical Box as shown in **Image 24**.

55. Attach Dome to Electrical Box Adapter as shown in **Image 25**. Please reference "**Mounting the Camera**", if needed.

**Image 24**

**Image 25**

## MegaDome® Pole Mount Adapter (MD-PMA) Installation Instructions

**Inside the box:**

A. Pole Mount Adapter
B. 2x Compress Fittings
C. 2x Small Steel Straps
D. 2x Large Steel Straps
E. Pack of four (4) machine screws

**Not included but needed:**

- #2 Phillips head screw driver
- MegaDome® Wall Mount Adapter

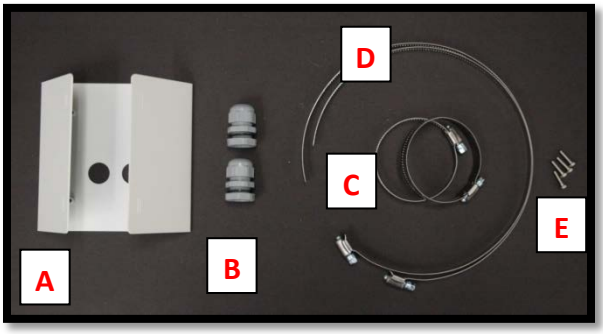


**Image 26**

56. Remove Pole Mount Adapter, Compress Fittings, Steel Straps and hardware from the box.

57. Install Compress Fittings to Pole Mount Adapter as shown in **Image 27**.

58. Attach MegaDome® Wall Mount Adapter to Pole Mount Adapter as shown in **Image 28**.

59. Run Ethernet Cable and outside power cable (if necessary) through the Compress Fittings and MegaDome® Wall Mount.

60. Use the supplied two Steel Straps to attach the Pole Mount Adapter to the pole and tighten the compression screws as shown in **Image 28**.

61. Attach Dome to Wall Mount Adapter. Please reference "**Mounting the Camera**", if needed.

62. Tighten the Compress Fittings to seal the wiring holes.

**Image 27**

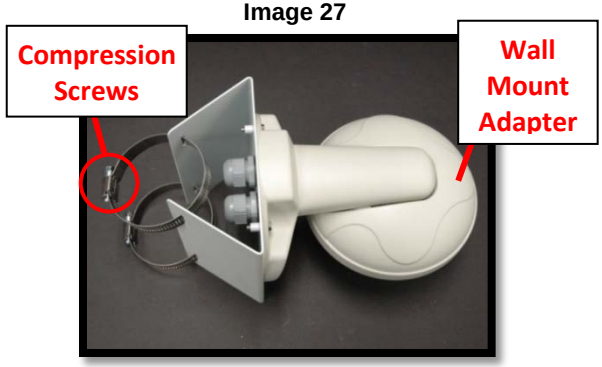


**Image 28**

**MegaDome® Corner Mount Adapter (MD-CRMA) Installation Instructions**

**Inside the box:**

A. Corner Mount Adapter
B. 2x Compression Fittings
C. Pack of four (4) machine screws
D. 2x Packs of four (4) wood screws and four (4) dry wall anchors

**Not included but needed:**

- #2 Phillips head screw driver
- MegaDome® Wall Mount Adapter

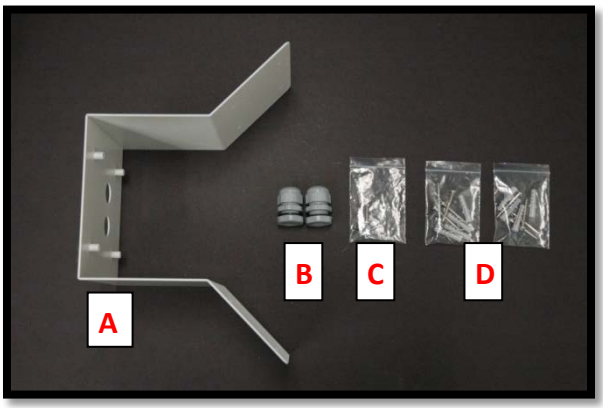


**Image 29**

63. Remove Corner Mount Adapter, Compress Fitting and hardware from the box.

64. Install Compress Fittings to Corner Mount Adapter as shown in **Image 30**.

65. Attach Wall Mount Adapter to Corner Mount Adapter as shown in **Image 31**.

**Image 30**

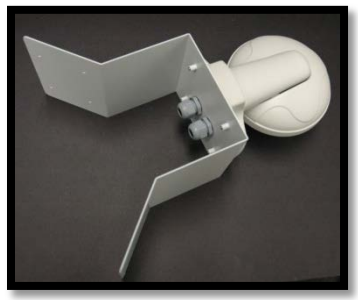

**Image 31**

66. Run Ethernet Cable and outside power cable (if necessary) through the Compress Fittings and MegaDome® Wall Mount.

67. Using the screws provided (or other hardware) attach the Corner Mount Adapter to an exterior 90° corner wall.

68. Attach Dome to Wall Mount Adapter. Please reference "**Mounting the Camera**", if needed.

69. Tighten the Compress Fittings to seal the wiring holes.

## MegaDome® I/O Cable Connection

**Inside the box:**

A. I/O Cable

**Not included but needed:**

- Flat head screw driver

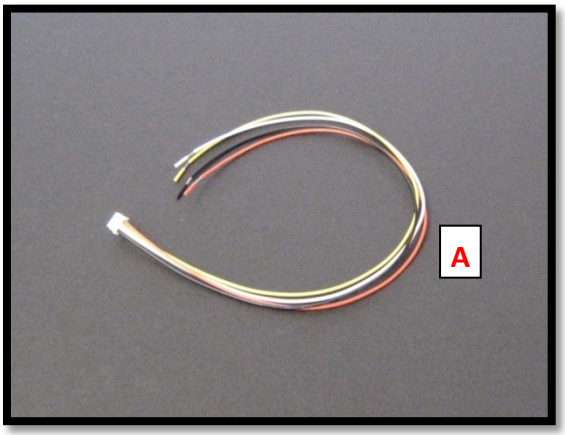


**Image 32**

70. To use the I/O ports of the MegaDome®, locate the "J7" connector. *NOTE: There are two connectors that look identical, be sure to use the one adjacent to the capacitor labeled "1000 jFK.8L9" shown in **Image 33.1** and NOT the one adjacent to the hole in the back of the camera as shown in **Image 33.2**.*

71. Run the I/O cable through the hole in the bottom of the camera and plug it into the "J7" connector as shown in **image 33**. *NOTE: The connection is a little stiff so be sure to apply enough pressure to connect it; using a flat head screw driver to push it in is recommended.*

| **Electrical Characteristics:** | | **Min** | **Max** |
|---|---|---|---|
| Input voltage (V) (measured between + and – terminals) | ON | 2.9 | 6.3 |
| | OFF | 0 | 1.3 |
| Output current (mA) (measured between + and – terminals) Applied Voltage Rage: 0 - 80V | ON | - | 50 |
| | OFF | - | 0.1 |

**Table 1**

NOTE: Both the input and the output are electrically isolated from the rest of the camera's electrical circuitry via general-purpose photo couplers. The input is additionally protected with a serial 250 Ohm resistor, and a debouncing circuit. Duration of any input signal should be at least 5 ms to comply with the requirements of the debouncing circuit.

| | |
|---|---|
| Orange | OUT + |
| Yellow | OUT – |
| White | IN + |
| Black | IN - |

**Table 2**

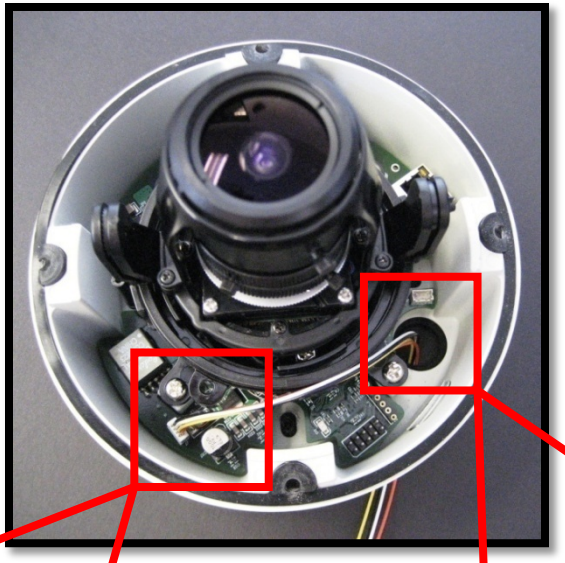

**Image 33**

**Image 33.1**
**Connect Here**

**Image 33.2**
**Do NOT Connect Here**

**MegaDome® Heater Accessory**

**Inside the box:**

A. Heater
B. Two (2) screws

**Not included but needed:**

- #1 Phillips head screw driver

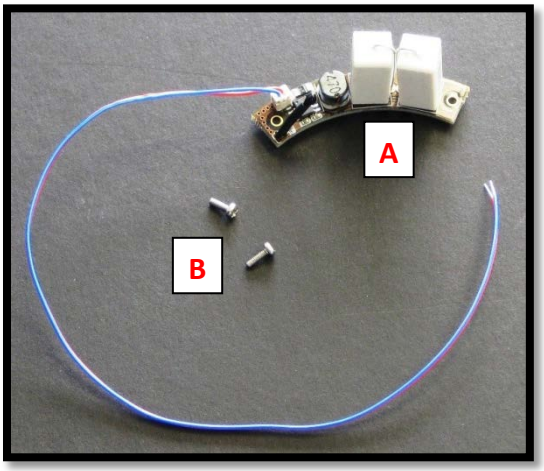


**Image 34**

72. Run the heater cable out of the hole in the bottom of the camera and connect it to 10-50VDC power supply. 10 Watts max. Red is positive (+) cable.

73. Remove the heater kit from the box.

74. With the heater element protruding out of the camera, align the two (2) holes on the heater board with the two standoffs shown in **Image 35**.

75. Screw the heater board to the standoffs as shown in **Image 36**.

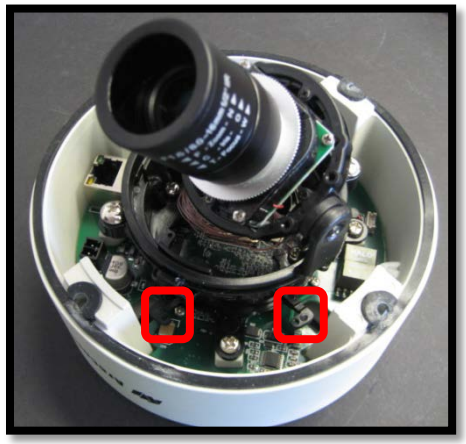

**Image 35**

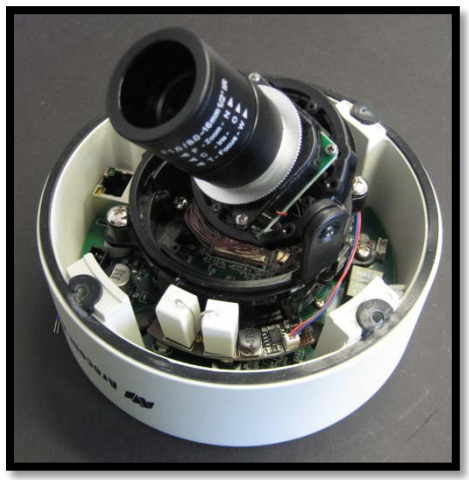

**Image 36**

**MegaDome® Focus Tool Accessory**

**Inside the box:**

A. Focus Tool

*NOTE: Focus Tool is a small piece of bubble which has same material and property as bubble's, including thickness, curvature and other optical performance.*

**Image 37**

76. Attach Focus Tool on the top of lens shown in **Image 38.**

77. Adjust the lens focus until getting clear image shown **image 39.**

78. Fix the screws on the lens

79. Remove Focus Tool from lens

80. Put bubble and secure it on MegaDome®

*NOTE: Focusing Tool is used to compensate the focus shift after putting bubble on camera.*

**Image 38**

**Image 39**

# Leading the **way** in **Mega**pixel **video**

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**Arecont Vision**
megapixel technology...
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